

REMARKS

The Examiner's Office Action mailed February 23, 2007 with a three-month response interval has been carefully considered. While not agreeing with the Examiner's conclusions, for purposes of enhancing prosecution we are filing concurrently herewith with the required terminal disclaimer.

A number of claims have been amended so as to more clearly set forth the present invention. As explained below, Finn et al. does not anticipate any of the pending claims.

Embodiments of the present invention make it possible to automatically and consistently evaluate intelligibility of audio output from one or more loud speakers into a region. As implemented in some of the embodiments, a sequence of audible or audio test signals can be consistently and automatically generated using control circuitry coupled to a plurality of loud speakers.

The loud speakers emit machine generated audible test signals into the region of interest. The audible signals can be detected using one or more microphones located throughout the region. Subsequently, signals from microphones can be processed using for example speech transmission index processing either on a distributed basis or at a common location. Results are processing, for example, respective index values can be presented to an operator.

In contradiction to the claimed structures and methods, Finn et al. discloses a digital voice enhancement system usable for the purpose for providing best available speech quality in a given environment. Multiple microphones are provided for obtaining a speech signal. One or more loud speakers can be used for reproducing the selected and enhanced speech.

For example, with respect to FIG. 9 of Finn et al., individuals 526 or 528 can speak into available microphones such as 508 or 512. That speech can be processed for example in filters 530, 532 or 534, 536 and then emitted at respective loud speakers such as 514 or 510. Thus, the system and methods disclosed in Finn et al. FIG. 9 merely attempts to present the best possible audio version of human

generated speech to be output from a respective loud speaker. The output audio is a version of audio which was originally spoken by individuals such as 526 or 528.

FIG. 10 of Finn et al. illustrates an analogous type of system wherein individuals would speak into one or more microphones 508, 552, 554, 556. Each of those speech inputs is evaluated at a respective SNNR unit such as 570, 572, 574, 576. One of the sets of audible inputs from the respective microphone 508, 552, 554 or 556 is then selected by switch 578 to be output to one or more loud speakers 514, 558, 560. In this regard, Finn et al. teaches:

"The switching decision by switch 578 is based on the largest of the SNNR signals. Switch 578 electrically couples the loudspeaker to the respective selected microphone. The selection decision is based on the ratio of how much louder a talker speaks over the background noise at his/her respective microphone." ¶ [0076]

Thus, as illustrated above, unlike the claimed apparatus and methods, Finn et al. merely attempts to audibly present the best possible representation of a received audio input from one or more individuals. Finn et al. is completely silent as to generation of audio test signals and relies merely on audio generated by one or more individuals adjacent to one or more of the respective microphones. For at least the above reasons Finn et al. does not anticipate any of the pending claims.

More particularly, in connection with various of the pending claims, claim 4as amended requires:

"circuitry that produces speech intelligibility test signals and which includes at least one audio output device which audibly produces the speech intelligibility test signals which will be received by the microphones." (pending claim 4)

Claim 9 rewritten in independent form requires among other limitations:

"where the control circuits include at least one of logic or executable instructions for producing speech intelligibility test signals to

be audibly output by the at least one output audio device.” (pending claim 9 and dependent claim 10)

Independent claim 11, as amended, requires at least:

“providing at least one machine generated speech intelligibility test signal”. (pending claim 11 and dependent claims 12-17)

The dependent claims add additional structure and processing are not disclosed in Finn et al. For example, claim 14 includes the following limitation not disclosed in Finn et al.:

“transmitting the sensed speech intelligibility test signal from the plurality of locations to a common site and then processing same to evaluate intelligibility thereof.” (pending claim 14)

Pending claim 15, which depends from claim 14 includes the following limitation not disclosed in Finn et al.:

“where the processing at the common site includes visually presenting processing results.” (pending claim 15)

Pending claim 16 includes the following limitation not disclosed in Finn et al.:

“where the sensed speech intelligibility test signals receive initial processing prior to be coupled to common site.” (pending claim 16)

Similar comments apply to the rejections of claims 32-35 as being anticipated by Finn et al.

Various of the claims have been rejected as obvious and unpatentable over Finn et al. in view Faltesek et al. published application 2005/0105743 A1. Faltesek et al. is commonly owned by the assignee of the present application and is not available as prior art pursuant to 35 U.S.C. §103(c). Attached hereto are documents from the Patent Office's Assignment database disclosing a common Assignee. The undersigned attorney of record hereby makes the following statement on behalf of the applicants:

Appl. No. 10/740,200
Amendment A
In Reply to the Office Action mailed Feb. 23, 2007

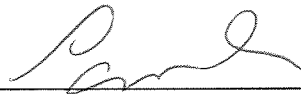
The above-identified application and Faltesek et al. published U.S. application 2005/0105743 A1, were at the time the invention of the above-identified application was made commonly owned by Honeywell International, Inc.

For at least the above reasons the pending claims are allowable. Allowance of the application is respectfully requested.

Respectfully submitted,

Dated: May 22, 2007

By



Paul M. Vargo, Reg. No. 29,116
Gregory J. Leighton, Reg. No. 57,672
WELSH & KATZ, LTD.
120 South Riverside Plaza, 22nd Floor
Chicago, Illinois 60606
Phone: (312) 655-1500
Fax: (312) 655-1501



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Patent Assignment Abstract of Title

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Total Assignments: 1

Patent #: NONE **Issue Dt:** **Application #:** 10716157 **Filing Dt:** 11/18/2003
Publication #: 20050105743 **Pub Dt:** 05/19/2005
Inventors: Anthony E. Faltesek, Patrick S. Gonia
Title: Automatic audio systems for fire detection and diagnosis, and crew and person locating during fires

Assignment: 1

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Assignors: FALTESEK, ANTHONY E.
GONIA, PATRICK S.

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Exec Dt: 03/10/2004

Assignee: HONEYWELL INTERNATIONAL, INC.
101 COLUMBIA ROAD
P.O. BOX 2245
MORRISTOWN, NEW JERSEY 07962

Correspondent: WELSH & KATZ, LTD.

PAUL M. VARGO
120 SOUTH RIVERSIDE PLAZA
22ND FLOOR
CHICAGO, IL 60606

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Patent Assignment Abstract of Title

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Patent #: NONE **Issue Dt:** **Application #:** 10740200 **Filing Dt:** 12/18/2003
Publication #: 20050135637 **Pub Dt:** 06/23/2005
Inventors: Charles R. Obranovich, Philip J. Zumsteg, Andrew G. Berezowski, Walter Heimerdinger et al
Title: Intelligibility measurement of audio announcement systems

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Assignors: OBRANOVICH, CHARLES R.
ZUMSTEG, PHILIP J.
BEREZOWSKI, ANDREW G.
HEIMERDINGER, WALTER
PHELPHS, JOHN A.

Exec Dt: 05/05/2004
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Exec Dt: 05/05/2004

Assignee: HONEYWELL INTERNATIONAL, INC.
101 COLUMBUS ROAD
P.O. BOX 2245
MORRISTOWN, NEW JERSEY 07962

Correspondent: PAUL M. VARGO, ESQ.
120 SOUTH RIVERSIDE PLAZA
22ND FLOOR
CHICAGO, IL 60606

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